

Claims 4, 6, 9, and 14-17 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for the reasons set forth on pages 2 and 3 of the Office Action. The Applicants believe that the foregoing amendments place all claims in conformity with the second paragraph of §112.

Claims 1 and 8 were rejected under 35 U.S.C. §103(a) as being obvious over the combination of Hesse, et al., US 5,274,571 (Hesse) and Shimoda, et al., US 5,479,358 (Shimoda). The Applicants respectfully traverse.

The invention is directed to improvements in interchanging power over wide areas, particularly across national boundaries. (It is noted that "countries", where used in the specification and claims, is intended to encompass nations or states or regions that are political entities having different peoples, lands, laws, etc., without distinction based on the term used. The emphasis of the invention is, broadly, in the interchange of energy as a commodity between energy-producing and -controlling localities having the characteristics of "countries", not in the political labels given those localities.) The invention is not concerned with the transfer of energy between neighboring towns or villages, for example.

Generally, governments make energy plans so as to provide all of its people with electric power. Thus, the demand for electricity is uniform, but varies from time zone to time zone, climate to climate, season to season, etc. Moreover,

electrical supply facilities need to supply enough power to meet an upper limit of demand. These considerations do not have national or political concerns.

On the other hand, transmitting power between countries does depend on national and political realities, such as differences between the laws of respective foreign countries. As well, different countries having different currencies that fluctuate value commodities such as power differently. Therefore, solutions to redistribution problems between and among countries are not trivial. The present invention was made to address these nontrivial problems using the measurement of transmitted energy as a basis for valuing energy interchange among foreign countries.

In Hesse, however, the total system is comparatively smaller than the scale of the present invention. This difference in scale is not the difference in scale discussed in the holding of In re Rose, 105 USPQ 237 (CCPA 1955), cited by the Examiner. Rather, the difference in scale in the present inventive field relates directly to the problem and solution themselves.

In Hesse, power consumption of various loads is measured and power stored accordingly. The Hesse concept, however, does not apply to the larger, international scale of the claimed invention because the problem of energy deficit and energy surplus among nations must be solved considering energy as a commodity. According to Hesse, if one small load needs

to draw more power, it may readily from storage of power not used. No quid pro quo is needed; the system simply does not have the problem or consideration of the problem of the international scale of the invention.

On the other hand, the measurement of energy on the energy path itself is a novel feature because different countries value energy differently. Moreover, different types of energy generation from one country to the next can be considered according to the invention; Hesse has no need to consider, for example, hydro electric power generation versus coal-burning power generation as a basis for how power should be distributed. Whether Shimoda teaches an electric power generator that Hesse could use does not place Hesse within the scope of the invention. Thus, the Applicants submit that Hesse is not relevant to the claimed invention, and cannot render it obvious alone or in combination with Shimoda or any other reference of record.

Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Hesse and Shimoda in view of In re Rose, discussed above. The Applicants believe that this issue has been addressed, and request reconsideration on the basis of the above discussion.

Claims 2-7, 9, and 13-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hesse in view of McClain, US 3,908,677. Again, the Applicants traverse.


McClain describes that if the current of a certain load is abnormal, the power from the present source is cut off by a switch and connected to another source by another switch. As in Hesse, the system of McClain is comparatively small, with no consideration given to deficit and surplus issues of different countries. In this sense, the situation is similar to the above rejection of claims 1 and 8.

Claim 10 was rejected under 35 U.S.C. §103(a) as being unpatentable over Hesse and McClain in view of Shimoda and St. Regis Paper Co. v. Bemis Co., 193 USPQ 8, St. Regis being cited for the proposition that practicing the combined teachings of Hesse, McClain, and Shimoda on "a plurality thermal power facilities" would be obvious. However, no matter how many facilities the combination of Hesse/McClain/Shimoda is practiced on, the combination fails to address the underlying problem and solution of the present invention as discussed above. Therefore, claim 10 is patentable.

Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Hesse and McClain in view of Naganuma, et al., US 5,537,339 (Naganuma). However, Naganuma fails to raise the level of either Hesse or McClain to the field of international energy interchange, and thus the combination fails for the reasons advanced above.

In view of the foregoing amendments and remarks, the Applicants request reconsideration of the rejection and allowance of the claims.

Respectfully submitted,


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